**28 September 2020**

**Day one**

**Welcome and opening remarks: Hoeschle-Zeledon, Africa RISING ESA & WA Project Manager**

Key notes;

* The official end of Africa RISING ESA Project phase two is in September 2021, there could be extension of at-least of one year
* To target of the 2020 review and planning meeting was to discuss what has been achieved and the gaps
* Most of biophysical data are not completed
* In future there must be greater focus on sensitizing and communicating findings data of the the research
* She emphases on the important to timely collect and clean data and post to the data repository
* Project outcome, 1,2, 3 is achieved well in our log frame, however, the outcome 4 and 5 has not been taken seriously. Hence, we have something to do.
* She requested the team to focus on addressing the gaps
* She encouraged the team to report on how many beneficiaries were reached, how they are reached and what was the return of USAID investment
* She explained the meeting should lead on how address the gaps with supporting evidences
* Tomorrow, she will present about the request from donors from the final report.
* To get prepared of the new CGIAR
* To take that opportunity toward the Systems research and Sustainable intensification because it plays the major role in the CGIAR for future
* According to Dr. Irmgard, depending on the new CGIAR strategy there might be the relevant road for AR beyond the 2021
* To enable us to position in a one CGIAR, the PCT with Chief scientist will hold the virtual workshop in Future of Africa RISING Subitizable intensification and systems research in one CGAIR, agenda is drafted an update to be shared. The workshop will be early November.
* She also acknowledged the support and contributions to the achievement and success of the Africa RISING-NAFAKA
* She appreciated the commitment and support by Jerry and USAID in general to the project and encourage continue commitment by the Africa RISING team

**ISFM - based system (TZ)-Job (contribution from the team)**

**Discussions**

Q. Wezi. On results on maize yield/beans form different farms in response to different treatments, I wanted to if the separation is within raw or column, also there should be clarifications on the yield variations

R. Michael. Farmer A and B are in equal zone (Galako) low attitude lower rainfall, C-D (Liloda)- medium altitude high rainfall, and Sabilo is medium altitude and low rainfall. The difference in sites contributed to the variation of farmer to farm. And for the maize are planted in column

C. Mateete: What else you need to do to support the activity and who is to do what and what is required?

C. Last slide; farmers output, policy briefs, these are type of things that we will support if you develop sub-activity against these topics they will be considered. Colleagues to be guided on what is presented from the slide on forward thoughts as presented.

C. Patrick. Job, some of the data presented are connected to genotype that you have for example for pigeon pea must be useful to know what type of varieties you have also for maize it should be noted it had different maturity periods, this can be looked carefully to explained some of the variation issues

Q. Gundula. Job, what is your plan in collecting data as we agreed? There was the plan to do survey and focus group on collecting Gender data

R. Michael. The planned is still underway Gundula, we are planning to do in two weeks times, (surveys and MGD).

R. Job. Gundula , the survey developed is an expanded ones that will have a lot of data and information. We are planning to do survey in October and by November we won’t be able to clear and analyze all the data, so it should be ready by Next year.

Comments. Azzarri. Job, I suggest we should be putting more emphases looking on indicators of human and social domain, all of us should consider this when collecting the data.

Q. Mateete. Job, the Southern Africa group are also doing ISFM, so what synergy activity can bring all the player together?

C. Regis. Mateete, I think this is in line with what is done in Malawi, there should be the opportunity to get a paper on wide arrangement so the meta-analysis become stronger with this variability arrangements, so I see there is a lot of synergies.

**Case studies: SI technologies use among farmers interacting with Africa RISING at different intensities (MW) – R. Chikowo, C. Thierfelder**

**Discussions**

C. Mateete. The technology might be not suitable to the typology of farmers that you are starting, you could also look on the baseline (production of yields before).

C. Job. There is a need to develop and activity or something else for farmers to pick-up the technology

Comment. Job. There should be a continuous linkage with the development partners to enabling condition for adaptation

C. Fred. Some of the metrics that Regis has talk about the household; dietary diversity, food consumption scorers are good data when it comes to finding the linkage analysis between Eastern and Southern part. These metrics were missing in Job’s presentation

C. Fred. It would also be good to add the confidence interval to show the statically significance difference

C. Azzarri. About the difference, I would be consequence in telling the difference between control, what affect the difference, when we talk about effects, we must make sure that they have not been affected with some other confounding factors

C. Irmgard. If the difference of maize was big and there are some issues, and if farmers have other priorities even though maize is a major food, I think this issue could be changed by simple education. What we are presenting is for different type of typologies and beyond the reach of farmers

C. Regis. There is a need to put more effort in creating enabling environment to farmer’s uptake of the technologies.

C. Munyaradzi and Regis should consider working on concluding to concreate data presented within the next 30 days, the data will inform the next experimental cycle.

C. It is necessary to have the differences and explain why there is such a difference and the wrong score on what to take off, is a vital project instead.

C. Julius. We can work together with Munyaradzi to do some simple econometrics to answer on the why questions which could be done if we do further analysis using some econometric methods

Action. Munyaradzi and Julius to plan on how do go further with the economic analysis.

**Reports: Livestock production studies - B. Lukuyu, F. Chigwa**

**Discussions**

C. Ben, on the study relating to mortality, wont it be good if we state the mortality vs the survival to make farmers more interested?

R. Ben. Danikou. This is an inverse of each other, the same data can be used to calculate the survival rate, but we also need to show the risk that bring out when we talk about mortality rate.

Q. Yasinta. Ben, when reporting on the effect of gliricidia, I have note that the where there was a decrease in mortality rate but again when you added about 15% of gliricidia in the feed the mortality rate increased, how can you explain this trend?

R. If you load too many tanning into the gut of the chick changes you can kill the chick, hence that why it causes mortality rate.

Q. Job. Ben, how do you plan toward a sustainability Mwanga platform especially the knowledge, how can we make sure this is sustained, has local ownership and can move beyond the project?

R. Fred. Job, the number of farmers we are reaching in Babati is broader (in livestock, agronomy, postharvest and soil water related issues). These number are attracting agro dealers’ interest to the platform. We are working on font and back end analysis to make the platform more engaging.

Q. Mateete. Ben, what about Malawi livestock work?

R. Ben. There were communications going on, I have no further comment Mateete.

Q. Mateete. How can you comment on the program level manuscript being proposed for livestock?

R. Ben. The one you decide when you were in West Africa is being led by Mwaikamu, we have started working on, I have contributed on the paper framework however it is not moved forward

Way forward. Ben should follow-up on program level manuscript being proposed for livestock

R. Fredy. Mateete, there are progress of the manuscript however there were challenge from the health-related issues with the leader. The discussions between me and Kindu is still on and hopefully the work on manuscript will kick back into progress. The manuscript is in 40% to the level of submission.

**Farm level systems case studies (TZ) – L. Claessens (includes partner contributions)**

**Discussion**

Q. Job: What you presented is only for three farms, I f I may know, what conclusion can we make for the larger number of farmers say thousands not studied. Are there some indicators of typologies whether these farmers are chosen to represent other farmers? also in optimization, what optimization that will need to be done?

R. Lieven: Job, the good thing is we can use the data from these farms to inform and simulate all farms in the data base.

R: Jeroen: Job, for optimization there were three objectives selected (labor, profit and soil quality). The optimization shows you can go in different directions given priority to the objectives. There are different ways to change the farms for example if we can ask farmer from tradeoff something profitable then a tradeoff could be on labor however, it depends on the priority that the farmer has and discussions we have with the farmer.

Q. Mateete: In the diagram presented, where are the information from the colleagues on soil fertility etc. fits in the analysis?

R: Lieven. Mateete, the information presented were from colleagues

Q: Mateete, So, it’s part of the disturbance scenario or?

R. Lieven: It is a part of improving the original farm farming systems

R: Jeroen. It is under technology where the new options weighted by the project comes in, it is the list of all options but there can be potential a longer list.

C. Mateete. The original scenario should be included and where the technologies from colleagues are used, and if it is validating. The arrangement of diagram should be clearly presented.

C. Mateete. Also, there should be comparison, disturbance to the original scenarios without the project technologies and disturbance to the scenarios with the project technologies. There should be results on how Africa RISING technologies are impacting the life of the farmer.

C. Lieven: Preliminary results indicates farmer that are using Africa RISING technologies are more resilient to shocks

Way forward: Lieven to make presentation for Malawi in the planning meeting. There is opportunity to build in what Regis is doing and include the information from IFPRI (the baseline data). It should be basis for good discussions in the planning meeting.

Q. Gundula. Lieven/Jeroen from the presentation it is shown that the household leisure time, was selected on social domain, how and why this selection made? because social domain looks on the intra-household differences so one won’t expect to the leisure time because we are looking at difference between different members of the households. The way this information is presented now, it is not clear.

R. Jeroen. Gundula. If we talk about the whole household labor, we need to characterize it under economic category. Alternatively, it could be to differentiate clearly from within the households (individual households, members and availability to works on the farm) therefore the distinction can be made. The way it presented now it is in two different categories however, it could be extended.

C. Gundula. For household analysis in term of leisure time, the social domain should also show who has less and more labor the concept conceals a lot instead of revealing what technology does to different members within the households.

Q. Patrick: I think the technologies themselves are going to help with the productivity (it is the important driver for adoption but not explicitly the key ones (e.g. for pigeon pea). It is the issues of economic SIAF indicator, my question is, are you going to embed the economic drivers? also, on the things like organic materials operating profit but some of them are connected to other things, there are series of things that should be made clear

R: Lieven. questions is how well is it parameterized ( the parameters; are the yields, price of product/ inputs, labor inputs, nitrogen fixation decomposing of crop product), there are many things need to be quantified, the question is whether those information available for all the Africa RISING technologies are evaluated.

C. There is a need to collect data essential from the sites and highlight them as we are approaching the end of the project

Food for thoughts: There are different production capabilities (due to agroecological potential) is this going to compare, Lieven, what is best type of scenarios as contributed of Africa IRISNG vs nothing (different scenarios)?

R. But I the exercise is more to evaluate all kind of options across ecologies, there might be a need to have a different kind of approach, it should be on for discussion.

C: Mateete. Lieven needs to give information on how much of the project partner’s data and time he wants in designing the activities of the coming year we want.

Q. Mateete: Lieven, do you still need college to help you giving you information (from Tanzania?).

R. Lieven. I am okay for Tanzania, the only problem for Babati there is no actual research going on now, but we have all the data there for it should not be the problem

R. Mateete. Yes Lieven, we do not do any more biopsychical, but you can do the social economic, you might need to polish those kinds of things together with Julius.

C. Fred. Michael and Job are doing an interesting biophysical work and those data could contribute to some of the information gaps that are needed on the table Lieven.

Q. Danikou. Can the model help to look on how the systems withstand the shock like that of COVID-19?

R. Lieven. It should be possible if we explain the labor requirements, but I am not sure whether the model is suitable for doing that.

**Technology delivery support tools – updates and plans - F. Muthoni, J. Groot, F. Kizito (20 min each)**

**Discussions**

Q. Irmgard. Jeroen, for the activity 5.1.6 you indicated dissemination of best fit technologies, so looking at your plans for 2021, will you reach the disseminate phase? what you are doing sounds for me is preparatory work then late on your recommendation could be disseminated

R. Jeroen. That is correct Irmgard, based on the final product is an application that can be used in this settings (that combine different type of data, farm advise that will go to farms and they can generate the list of most advised technologies ).

C: There is a need for Jeroen to modify the wording of the Sub-activity 5.1.6 from how it was presented

Q. Irmgard: You said you can basically target individual farm, if we had the resources and we would collect data on all the farms we are working with, could we make the recommendations on all the individual farms on what will be their best technology setup

R. Jeroen. Yes, Irmgard that is the idea, that will go to other farmers outside Africa RISING data based even beyond the project intervention areas. This approach could be generic hence generally applicable; however, the issue might be to have an efficient prediction however, the statistical principles that relate to generic approach could be applied to many farms.

R. Irmgard. So, what can we do to get close to these ideas (that farmers could get individual recommendation)?

R. Mateete. Jeroen, what is between you Lieven and Francis that is different or similar? also what legacy document that can you give us in a simplified form (easy to explain).

C. Jeroen. There should be more explanation, Mateete may assist us on how to structure that.

C. How the team works together is important, they should be communication between Lieven, Francis, and Jeroen. The linkage is not clear hence clarity is needed.

C. Irmgard. What I need to ensure is we get practical/tangible results. How the work helps in practical times to target the validated biophysical technologies and disseminate further. help farmers to adopt the technology and get an impact at the end on the farm.

C. Azzarri: There is need of extra effort into actionable action (from each of the intervention), translate the scientific knowledge into the readily actional method

Q. Swai. Francis, on activity related to land degradation, what is the key messages especially to policy makers. For Jeroen, when will the results be revealed, at least to have some of footprint to our district people those we have worked with nine years ago?

C. Fred. There are some of missing information from the presentations including the social cultural and governance nuances that are not necessarily represented. Once the study is done, we might do some validation phases where the technologies will be suitable and consider the nuances that would impact the technology from being taken off. Components that goes beyond that involves decision making should be considered.

Q. Mateete. Francis. You were supposed to produce the handbook of maps Francis

R. Francis. Yes, it is out, Jonathan is doing editorial and cover design.

C: Mateete.You should consider involving the users experiences to review some of the materials we developed for them and make modifications and continue engaging with the users.

Q. Irmgard: Fred, did these chat msg had brough impact to farmers also we worked with farmers in Southern highlands areas (Babati) is there any plan to extent to Kiteto and Kongwa.

R. Fred. Yes, we are looking on such information to farmers. I have not explored that, Swai will likely have such of information.

C: Swai to let know Fred on how he can be of help to bring in the suitable msg to farmers for Kiteto and Kongwa.

R: Swai. The effort can be concentrated to Kongwa and Kiteto.

R. Fred. Yes, that will be a way forward.

C. Detailed discussions to go on between Fred and Swai.

C. Patrick. Fred you should consider testing the established platform on developed systems for example community seed banks platform

R. Fred. Yes, this would be possible, but we would need to do quick consultancy survey (all suppliers contacts, map and demand) supplier’s and demand actors. If this is available, it can be doable.

R. Patrick. This information is available Fredy and Patrick to further discuss.

Q. Julius. These activities relate to outcome four, I will challenge Patrick to develop the idea further in his presentation, trying show how to link farmers to market using the Mwanga platform app.

C. Mateete. The NAFAKA is still interested in this topic (Mwanga platform) because they are reaching many more farmers with Mwanga platform, and would be valuable to the NAFAKA

**29September Day two of the meeting**

**CIMMYT-led activities in Malawi and Zambia (C. Thierfelder)**

Q. Yasinta: Munyaradzi, on food security there was variations between the household which are female headed versus the male headed households meanwhile there are still difference between the locations (Southern and Center Malawi).

R. Munyaradzi: The variations are due factors such as education, cultural and sources of live hood for example in Southern Malawi, they are autonomy in term of decisions making power, that they have power to make their own decisions while they have control between the agricultural production. In Central Malawi they have alternative household, they do not have decision control for-example some activities like marketing and decisions are controlled by the male.

C. Mateete. Christian, I know you are doing targeting study with Francis, and I can imagine there are different CA in different sites, do you see that coming anyways particularly from within the different sites you are working with?

R. Christian. Yes Mateete, we have different levels of targeting that we have to think of; biophysical targeting ( where the CA and which CA might give the best return) , social economic targeting of the technologies ( the CA might not be solution to all the farmers) hence we have identified farmers which will take CA more easily than other farmers.

In Southern Malawi for example, factors like economics benefits (labor intensive vs less intensive, cultural is also major factors in some areas. CA are not performing well especially to areas where there is constant water loading problems.

Q. Danikou. Christian/Munyaradzi, the diversity indexes that was presented which one was used? The crop diversity.

R. Munyaradzi. We used the crop diversity, the proportional of the area allocated to the crop over area cultivation.

**MSU-led activities in Malawi minus livestock (R. Chikowo)**

C. Irmgard. Regis, we must get our research output to the farmers showing what are we doing to get the services we offer to our farmers. This could be important to farmers for adaptation, and useful for the next generation to the farmer.

R. Christian. I agreed with you, we must have to work toward that, transform the technical messages in the user friendly.

C. Regis. The emphasis could be to start working with the extension systems strongly, to channel the information.

**Monitoring and Evaluation: Status on partnerships, targets and Dataverse; impact studies plan, discussions and assigned responsibilities (Lead, C. Azzarri)**

C. Irmgard. For the coming final reporting we need to be specific on clarify our beneficiaries (whose who are benefits a ( only from one research outputs vs the real beneficiaries ( whose benefiting to more than one outputs), this will add value to number of benefices

C. Irmgard. Azzarri, you mentioned collaboration in the analysis of writing up of data collected with the AR-NAFAKA project while the project is ending, with whom are you going to work with?

R. Yes, Irmgard, we are still collaborating with Haroon, we hope to find an agreement to work with him even after the project close-out because we contributed to the survey, and the agreement was we will work together after the data has been collected

C. Mateete. Crossing cutting studies on approach you want to implement with the communication team is very useful for our final reporting to inform the donor on what approaches we use for to scaling and how useful are they.

R. Azzarri. On the program synthesis, we have been working intensively for Ghana, we have not had the time to look at other collaboration so far, especially initiate these scaling document with Jonathan but that is in our ladder. We want to solidify the analysis for Ghana cases so as we can be able to expand it once we know the way forward we will be clear and make time for other collaboration including the communication team.

C. I think the Chief Scientists are working on the scaling paper, is it the like what you want to do? Because it sounds like what you are planning

R. Azzarri. Okay let’s make sure we are in loop and e engaged with the Chief Scientist so as we can work together in this however the idea is for us to collaborate with the partners on the ground to see what feasible and available.

Q. Christian. In Zambia for example there were issues of the with-draw of partners because of funding challenges hence in Zambia in reached target is not higher. How, we can deal with this situation?

Q. Mateete. Azzarri, for government extension services, the play part in scaling our technologies and hence have contribution to our numbers, however, this information was missing in your presentation

R. Daniel. Mateete, for baseline information on governance, I have the information from Malawi (through discussions with the DADO). For Tanzania and Zambia, there is a need to confirm some of these numbers from the extension officers

R. Christian. Daniel, for Eastern Zambia and Southern Malawi I work with the Machinga ADD and their extension personnel, the number are from government extension too.

C. Patrick. The number are there is a need to clarify where they are.

C. Ben. Daniel, there are number of livestock too, I will find a way to get contact with the extension people on ground to have those number and submit.

C. Partick. We must be keen in getting evidences to verify the numbers, e.g. contacts details etc.

C. In Tanzania Swai, Ngowi and Kimaro will link Daniel with the Extension officers and Led farmers to have the names and numbers as soon possible.

C. Mateete. Daniel, what about the quality of data that is being uploaded in our database e.g. reporting data guided by the domain?

R. Daniel. There are meta data template that guide the researcher to ensure they have captured quality data and there are instructions. I will go back and review if where SIAF domain it was originally means to make sure they are included in here.

A. Mateete. Daniel, you need one sentence in underscore that state the data has been collected under SIAF (productivity etc.)

C. Daniel to confirm the data and consult researchers who did not present the data well

Q. Mateete. Azzarri, you need to be clear on where you need inputs form ESA team so as they may prepare into planning

A. Azzarri. We want information that appears in the BBTT.

C. Daniel to share with researcher the permission needs for BBTT. For scaling beneficiaries, the data needs are different, again Daniel to communicate the needed information with partners

C. Daniel to work with the PIs to make sure the information needs in BBTT is consistence to what they have been planning in collecting otherwise there should be other discussion with the Chief Scientist.

**30September**

**Day three**

**Introduction/Guide to Planning (M. Bekunda)**

**Guide to planning by (B. Mateete & H. Irmgard)**

**Q and As**

C. Christian. For the case of success story Eveline should become active and visit the field to do success story and get involved in the field

C. Fred. In reference to the case studies related to sustainable intensification, it is an opportunity for us to bring forward the SIAF framework for example as Christian presented, to show how social, biophysical aspect it would be a good platform for us to promote it further

C. Patrick. For success stories, Communication team should communicate with the USAID teams to get the guideline to success story and share with the team

Action: Guideline for success story, a sample of success story, and a template

Comment. Patrick. For case studies, must also relate to what we think are the big story we want to tell out of the project be it research or related to development impact outcomes. If we work on that road, we will have high chance of the document being delivered and that is acceptable. The team should also have further consultation with IFPRI especially on the guideline. We must think about the attribution factors when we think of the developing case studies

C. Mateete. When we present about the evidence around impact pathways, there should be references (meaning they should have been published somewhere), we should not present tables with no reference. I am proposing for anyone who is planning for publication, we should refer to this guideline and see how our publication will likely contribute to.

Q. Irmgard. Julius, how do you think is it feasible to get data on the return of this investment along this outline.

R. Julius. It is possible Irmgard, with the regards to things like estimating the return of investment, that is possible but, the other things we can do is to see what has been done by the different researchers, what has been invested and do an ex-ante impact analysis (look on net and present value, cost benefits, ratios). This will give clear picture of what has been invested and what are the return, and if it was to be scaled out to millions of people, how much investment will benefit the people.

Q. Fred. Daniel, on substantial part in the final report, how best can we progressively do that, like how do we invisible the process moving forward? How will this get involved, I would need some clarification.

R. Daniel. Fred, I can take this for Southern and Eastern region.

C. For Impact reporting, it was agreed that the targets should not be changed rather than there should be documents (with solid evidences) that support the explanation on, what, why and how the targeted were reached or not reached.

Q. Julius. To what extent for instance the end line survey that will be done in February can contribute to nutrition, productivity and economic impact?

C. Mateete. Daniel to keep engaging with IFPRI informing them we need such information so as the relevant questions can be added to their survey.

C. On the issue of number (beneficiaries), M& E to take stock of where we are with the numbers. Daniel to start working on these figures to see how far we are with reaching our target.

R. Daniel. There are numbers for direct beneficiaries (ESA), these numbers are of good progress so as for developing partners.

C. Daniel. We need to consider categorizing the number at national levels e.g. specific for Malawi, Tanzania, Zambia. This will give a clear picture to where our targets are mate.

Insights. To learn from Africa RISING NAFAKA partnership, in future we should have involve the development partners from the start (planning stage).

**Value Chain analyses: Status, Plans, Discussions and Responsibilities-Julius Manda**

Q. Irmgard. You mentioned these two-value chain analysis, maize and ground nut seed analysis. The emphasis was on seeds in the two- value chain seeds, why was seeds focused on?

R. Julius. These were activities proposed when I came in, and the reason is there were seeds that were produced under Africa RISING, the deliverables it was perlative to look at how does that seed moves from all the way from the research and up to the time that it reaches farmers. On seeds again there are a lot of problems for example regulations, policies etc. If we identify some of these problems, it will help the project deliverables to move to the product (the farmers using these varieties)

C. Mateete. Irmgard, when I was recommending this study, I was thinking of the two systems, maize and legumes, for the legumes is very difficult to have companies taking these seeds up, I was looking on comparison of seeds systems ( marketable) and those which are not marketable. I want to see how these two systems are compared.

Q. Partick. There is a slightly different between the seed systems value chain which is the sub-set of the maize value chain. Julius, isn’t that you are proposing something bigger than what the seed value chains are focusing on? Because, gain value chain is all about nutrition, and income etc.? Seed value chain will be the supply and the demand side of the improved material. My suggestions would be, maybe we shall try to combine the two into one publication and we can really be able to compare otherwise, there might be so many publications into individual value chains. We also might consider looking on other touch-up data mainly on social aspect for example gender and others social information and nutrition information because of consumption part.

R. Julius. Patrick, the seeds value chain that I am proposing is very different, what I am proposing is for only the seeds and ICRISAT to finish-up what they started last year. What I am prosing now is not on seeds, the idea for now is the am proposing the interpoint should have been nutrition, and this was not really done.

Q. Job. Julius, is part of this work involves Babati, if so, what work is going on there? Because for me I have seen success in term of these good varieties that farmers are using in Babati. Over the years partners whom has been working with us over years example Minjingu are now operating in Babati, Meru agro was also linked to farmers by Jumbo.

R. Julius. Now I am looking at where we can implement this activity, and for what you have suggested is useful and let see how we can do it.

C. Jumbo. Babati is very good example of success in term of maize, and a good potential area for maize, and they have been adopting number of improved varieties. For this study Julius, we may include Babati and have it as a baseline (to show how things are working and how does the seed value chain look like, so that we can compare). I think we can build on that to do further work.

C. Mateete. These crops value chain has been done, then technically we will not prepare them. But when we go to the next stage like for Babati team has said, if there is an existing value chain for maize, and there has been added value , what I am asking from Julius is, if this maize value chain has added value by Africa RISING, we need to look on how has it shifted the value chain that existed. To show how the introduced technology had made changed to value chain that had exit. If we do that, we can put many people on board, because many people have had technology that contribute to maize production. These would be a relevance study.

C. Julius. It is the good proposal we can see for example what has Minjingu has added to the value chain, then we can claim that it is the AR that has contribute to improve the value chain but also we need to look on the nutrition side in as much as we want to look on what has the technologies has been contributing but we also need to look on the nutrition.

C. Irmgard. Julius proposed in fully in value chain analysis, and then Mateete was saying they are already in existing the value chain; however, they are lacking particularly gender and nutrition aspect. So, can we use those exiting value chain and add the missing aspect; gender and nutrition and what Africa RISING has contributed to enhanced value chain.

R. Julius. This was the idea Irmgard. The idea is, we will review the study that we have and see how the Africa RISING technologies are fitting in and show what is the benefit of the technologies in this value chain. What I was proposing was the improvement of what has already being done.

C. Mateete. Julius, if you have baseline and enhanced it, that is what I was also looking for. We can now be able to explain how the AR technologies has enhance the value chain, and then we are able to show what AR has contributed.

C. Julius to develop the master plan and show where people should contribute.

**ESA-level farm systems analysis: Status, plans, discussions and assigned responsibilities (Lead, L. Claessens)**

**C**.Mateete.Same sub-activity to be reversed, and people who are responded need to know, the deliverable and timeline should be there we should know how to approach it

If future scenarios are based on AR information, it’s okay. The outputs were okay and acceptable

R. Lieven**.** Mateete,I did not mean extra data collection on neighboring farms but what I mean is comparing to surveys that has been collected, basically making use of data that has been collected and no extra data collection for this activity

R. Mateete**.** Okay Lieven**.** Then this should be clearly presented in the workplan and people should know what to provide

C. Fred. In the context of scenario analysis, I was wondering, you had already determined the three scenarios in the context of price shock, labor demand, and drought. I was thinking may be this can be pinned with what Africa RISING has been doing for example in Babati we did participatory needs prioritization with farmers and extension agent, This can be pinned to the your previous works because, the information can useful in possible scenarios which can buy in.

Insights. Mateete. I was thinking on numbers (beneficiaries), about reaching the households, farmer Maile, If those NGO are reaching more households because they access our technologies through our trained farmers like farmer Moshi Maile, do we count these beneficiaries in our group?

We train farmers trainers to train farmers, and Maile is training the development partners. This can be some new things for considerations to our reporting and future publication

C. Francis. Lieven, when I look at the principle of system dynamics I need to understand what the focus of this modeling exercise because from the description provided, Moshi Maile farm could be the best case scenario in the farming system within Kongwa and Kiteto, and this need to be compared with the worst case scenarios ( farmers who are practicing poor farming practices) . In my view, the modeling exercise should set a boundary which is bigger, and Moshi Maile farm should be a subset such as maybe if it is a village ( Mlali) that we are dealing with farming systems in Mlali we parameterize how things are done then when we come at looking at the scenario that when the farm of the famer Moshi Maile should come and look on the best scenarios outcome and compare with the worst case scenario or business as usual outcome. Therefore, we should more composed in gathering information from those worse case/business as usual scenario.

Q. Lieven. For Tanzania, I was wondering from the recently household survey do we have enough data on human and social domains?

R. Gundula. Lieven, I think the basic question for you is what you want to look at in social domain, because the research question is still not clear to know. It is important for the PI to mention on what needs to be included in the social domain.

C. There is a need for further discussions, however the original workplan had stated the research questions and the data needed.

Q. Mateete. What system studies are you doing in these two farmers?

R. Lieven. We are doing the SIAF that why we need all the domain covered, and the farm design study that is also system analysis with all the questions covered.

R. Mateete. Okay Lieven, but how does that system as the farm come-out what is it that we are looking for? The data you want are for systems or farm design?

Action. The PI should identify the system activity that brings the data together where Gundula can fit in.

C. Gundula. There is a lack of clarity of how the farm design study linked to the farm system diagram

C. Francis. Lieven, I think the issue of clarity is due to some small issues of organization. I am not sure the approach that you follow on the farm however, in general, in system dynamic there are five steps that need to be followed and the questions that Gundula is asking is which steps have been covered. The question can be on the articulation of the problem knowing the hypothesis etc. I think further discussion should be following the five steps within the system dynamics, may be the steps need to be revised so it can become clear. The steps are necessary and if this discussion are agreed upon, I can also come on board for some inputs.

C. Julius. Lieven and Jeroen, should incorporate Francis in their work.

Action point: To discuss the design so everyone to know their responsibilities by next week 2nd October, if there is a need to reformulate and finalize the plan. The meeting between Jeroen, Francis, Gundula and Julius to concretize the plan for the activities.

**How we want to setup case studies in Malawi**

C. Mateete. Lieven should provide guideline. There should have been research framework (a diagram) showing the plan for Malawi, what is needed? And what to be done as the basis for farming system analysis.

C. Regis. Lieven to consider visiting Malawi for next year so as we can work on integrating the kind of system from Tanzania experience and build the case around Malawi farming case study on what we have initiated is still hanging. I am inviting you to comment what we have intended to do for the first seasons, and from your perspectives what are the missing link and how intensive we could have done it and how do it better in the coming season.

R. Lieven. The lesson learnt from Tanzania was we missed the whole farm data as the base line to start with. So, Regis, do we have in Malawi, farms that you may identify that we have whole farm data for all activity data (both qualitative and quantitative for the whole farm)?

R. Regis. Our objective is also to get the whole farm data therefore, we designed three models that we were to implement at different times. Two have been implemented. So, there were selection of farms to understand social economics, farm sizes, farm parcels, the range of the crops on the farms.

R. Munyarazi. Lieven, we have the counterfactual (the control) instead of the base line, so from the whole farm analysis we can compare those who have been practice versus for those who did not practice the technologies’ and we can see the trend.

Q. Jereon. Regis, how many numbers of the farms do you have in plan?

R. Regis. We are tracking in detail on the 36 farms.

Q. Jeroen. Is it the division of best practices farms and control farms?

R. Regis. We included the three mother, three baby farms and control for sites.

C. Mateete. There should be a sub-activity which addresses farming systems in Malawi. It should have a lead and responsible person for each activity. Then there could be individual sub-activity plan that contribute to the main sub-activity.

Action. Regis should take lead, and he will work on colleges to get inputs.

C. Mateete. There should be commitment on who does what.

Action. Regis and Munyaradzi to share the three models (instruments)with Jeroen, Lieven on 2nd October.

Action. Discussion on design of the sub-activity, by Regis, Jeroen and Lieven on 9th October

Action. Proposed sub activity on farming systems submitted to the Chief Scientist by end of October.

**Social/Gender studies: Status, plans, discussions and assigned responsibilities (Lead, G. Fischer)**

Q. Gundula. I would be interested to know, if Are there any scientist who will be interested to developing the training scaling unit for use with the scaling partners on their technologies.

Q. Ben. From the livestock perspectives, it would be a good continuation if we are part of that to have an input with the training tool.

Mateete: Gundula, Regis formulated some basic typologies I though it be good to make use of those typologies in term of Gender.

Regis. Gundula, I would recommend from the study you are proposing you may think on the two mainstreams (down through and group), considering there are invisible use differences and those who came with facilitation making it economical enterprises of those small-scale farms. I think start from there, in simple way we can investigate the gender issues.

Comment. Jeroen. Gundula, you may also want to have look on some report produced by IFPRI there is a study that included some social domain and typologies, it might be of use to get some background information.

Q. Mateete. Gundula, if people get involved, what type of involvement do you want.

R. Gundula. Mateete, I think the output is training unit in which we combine a technological training (a facilitated discussion where husband and wives come to the meeting to discuss on the decision-making process, and other process within their household).

It will be interdisciplinary cooperation from day one from the section of technologies that can be offered in a certain context together with the biophysics, and part of the training to be developed by biophysics and social scientist, and there should be discussions on how the component are put together.

C. Mateete. Gundula, the selected technologies should be the one that has been documented, it should have evidences that it works.

Q. Comment. Antony. Gundula, the decision at the household as presented is going beyond the technology thinking and approach so, how are you fixing the approach to fit in the technology, is it from the technology level, household level? Or how do you match the two?

R. Gundula. We are going to work with household within the project context. In the training technologies will be offered together with decision support tool. So, it is a dry ran for the household to discuss different options and what these options matter for them.

Q. Christian. I am not sure if you are willing and happy to work in communities where we work (Malawi and Zambia community) also, for concept of building the training unit, what are we committing to, is it the time and resources?

R. Gundula. It is the management decision, there is a signal here will be and international level to do this activity, because I can not help to fill the gaps to all Western, Eastern and Southern Africa.

Q. Christian. Okay Gundula, so how to make it happened?

R. Gundula. So it’s a new study that I brough for discussions, this study will also need to be adjusted

C. Munyaradza. Gundula, Bringing the husband and wife together in decision making that is so dynamic, that depends on opportunities that are presented is sometimes very difficult also training them in the social complex environment on decision making, it is something that is difficult. Because the way households make decision is dynamic and depends on cultural, timing and what technologies’ we are talking about, for example in setting of Malawi, we have women have control, and some societies men get autonomy, even when you bring them same room, there will like be no changes. I am sure the training tool is there to achieve?

R. Gundula. Munyaradza, the idea is not training people change in certain manner, it is providing the platform for discussion to see where the household could move and how decision could be made. There are number of studies in Malawi and Uganda where this methodology has been used and have proven to do some shift. I think we should give this a try.

Comment. Munyaradza. Okay, it is noted, however given that the project is ending, and you are bringing the new study, I am not sure what you want to achieve.

Q. Mateete. Gundula, if you may make it what is the output? It is the tool or?

R. Gundula. The output is the training unit to be used by the extension staffs NGO and other partners. It involves a gender transformative tool imbedded in the training units on technologies. This kind of social technical integrated approaches has been trained out and evaluated as well.

Q. Mateete. Okay so does it mean Africa RISING group you want to form are the outputs or these groups will use the tool and tested to see if it works?

R. Gundula. Mateete, this is an actual research approach, we do research and develop the training unit of the team of biophysics and social science, and interested scale partner. Then the tool will be developed, tested and get the feedback from the respondents and the scaling partners can use in larger scale.

Comment. Mateete. I though the transformative approach was tool, and the training unit would be testing the approach instead of having permanent training unit to work with development partners. As the training unit to operate, they get information to where the gender transformation tool works or not working. The way you are presenting this is we are going to have the training unit to keep helping development partners.

R. Gundula. Yes Mateete, but this is under outcome five; the scaling and dissemination part of the logical framework.

R. Mateete. I do not know If the training unit is the decision supporting tool, it should be transformative approach, is the decision support tool that we should be developing

R. Gundula. Mateete, but what kind of decision are made within the households, we look on how people cultivate their fields and keep their livestock, which is then related to our technologies’.

C. Christian. I think it will be great to have training facility, but we might be too late to that to make a transformative change, the idea is good. But you want to create now into a disciplinary that is good , test and hand it over to a government entity /NGO , I fear is un achievable maybe in a half a year or year, especially if we will have no funding how will the training unit will be further supported and how do we make sure it is sustainable in the future.

R. Gundula. Okay Christian. We can still look on some alternative am going to rethink and rephase however, it is important that the team should think about the 5.3 outcome means?

R. Christian. Gundula Developing a decision supporting tool that helps families in making more gender sensitive decision will be a great outcome. But you went further also to have the training unit that uses that tool and build a cover of gender sensitive farmer, I think that is the step too far that we can achieve within the range of this project.

Comment. Mateete. Gundula, how I enterprete the tool is way different from the training unit. Defining the tool becomes a challenge especially when you refer the tool as the training unit

Comment. Shitindi. Gudnula, if I may know, what is the group standing for and what are the technology that needs to be included in the training and what are the post harvesting processed products standing for?

Way forward: To have more discussion about the topic and proposal with Gundula, Fredy, Mateete, Job. Gender specialist and researchers (Regis, Patrick, Christian). Gundula to set the date by next week on when the time could meet.

**Reflections, including thoughts on Phase 2 close-out activities, and next steps (M. Bekunda)**

**Notes.**

* The Chief Scientist proposed follow-up meetings to iron up somethings.
* The lead PI should make a global workplan against the four main activities and see how partners fits in. Partners should follow guidance from the PI.
* The first comes and first saved principle will be applied
* The team to focus on the research activity bullets listed in guide for planning and write sub-activities against the bullets and should correspond with sub-activities that are on completion stage in term of bio-physical data collection
* For Biophysical data for activities which has collect data for one session, should be able to support the second session sub-activities
* Incase if there are incomplete data collection for the data on social, economic and human conditions, then researchers shall justify why they need extra resources and develop sub-activity against that same as for the new social, economic, human condition research study.
* For long term sub-activity experiments; the project should continue to support
* To continue working with existing partnerships
* Adoption spillover studies, there are discussions between the Chief Scientist, and IFPRI and Julius
* In researcher sub-activity work plans there was a need to include publication.
* The good publications will be supported, and the team need to finalize the publications as proposed
* The team should start developing the workplans and submitted to the Chief Scientist for further evaluation to see if the developed workplans fits in under the main leading activities

**Closing remarks (Prof. Mateete, representing I. Hoeschle-Zeledon)**

* There will be some reporting and close-out activities, and we shall plan them as the years going along
* There shall be continue communication among colleagues
* We should help Gerry Grover, and write things to support Africa RISING
* According to Chief Scientist, there are some further discussions on how Africa RISING fits into one-CGIAR
* The transition into one -CGIAR, according to Chief Scientist Africa RISING might stick independently, and this can be possible if enough support is provided to the donors’ inquiries/demands